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Performance Audit

STATE MOTOR POOL

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This report contains recommendations for improvements in the management and operation of the State Motor Pool, including:

- ▶ Transferring the motor pool functions to the Department of Administration.
- ▶ Changing the policy on fleet size and permanently assigning vehicles.
- ▶ Revising management information systems.
- ▶ Improving rate documentation procedures.
- ▶ Reevaluating present staffing of the Motor Pool.

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ROBERT R. RINGWOOD
LEGISLATIVE AUDITOR

July, 1982

JOHN W. NORTHEY
STAFF LEGAL COUNSEL

The Legislative Audit Committee
of the Montana State Legislature:

This is our performance audit of the State Motor Pool. The motor pool is administered by the Department of Highways.

This report contains recommendations for improvement in the management and operation of motor pool activities. Included in the audit is a recommendation to transfer the motor pool from the Department of Highways to the Department of Administration. The Department of Highways and the Department of Administration responses are contained beginning on page 53.

We wish to express our appreciation to the director and the staff of the department for their cooperation and assistance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott A. Seacat", with a long, sweeping horizontal line extending to the right.

Scott A. Seacat
Principal Audit Manager
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Approved:

A handwritten signature in black ink, appearing to read "Robert R. Ringwood", written in a cursive style.

Robert R. Ringwood
Legislative Auditor

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ADMINISTRATIVE OFFICIALS

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CHAPTER I

INTRODUCTION

This report is the result of a performance audit of the operations of the state Motor Pool Unit within the Department of Highways. The audit was authorized by the Legislative Audit Committee at the request of the 1981 House Highways and Transportation Committee.

The report addresses several aspects of the management and operation of the state Motor Pool. These aspects include financing, maintenance, fleet size, management information, and staffing. We found that problems in these areas could be alleviated through more effective administration, improved management control, and changes in policy. The difference between the mission of the Motor Pool Unit and the mission of the Department of Highways is presented as the underlying cause of the administration and management problems. The report notes that the Motor Pool is a service function organization within an agency whose purpose is to construct and maintain Montana's highways. Transfer of this function to the Department of Administration is presented as a means of placing the Motor Pool within an agency more aligned with its mission. The report includes recommendations addressing these problems in order to promote more effective and efficient operations of the Motor Pool.

Prior to this audit, two financial compliance audits of the Department of Highways, which included recommendations affecting the Motor Pool, were performed by the Office of the Legislative Auditor. These audits each addressed two fiscal years: one ending June 30, 1978 and the other June 30, 1980. A performance

audit which recommended centralization of the state Motor Pool was conducted by this office in 1973.

SCOPE

In conducting our current audit of the Motor Pool, we reviewed the effectiveness, economy, and efficiency of the Motor Pool Unit's operations. We did not review the operation of the Equipment Bureau within the Highway Department's Maintenance Division. The review does not encompass an audit of the unit's financial transactions or overall compliance with state laws.

The audit was conducted in accordance with generally accepted governmental performance auditing standards. The time period covered by the audit is fiscal year 1980-81.

ORGANIZATION

The report is organized into chapters which address each of the operational and management areas mentioned previously. Chapter I is introductory. Chapter II provides background information on Motor Pool operations. Chapter III reviews the unit's policies in acquiring a fleet of vehicles. Management of the fleet is reviewed in Chapter IV. Chapter V discusses the financing of fleet operations through rental rates. Chapter VI is a discussion of staffing. Chapter VII proposes the transfer of Motor Pool services to the Department of Administration.

CHAPTER II

BACKGROUND

MOTOR POOL FUNCTION

The Motor Pool was created by an act of the Legislature in 1971. At that time, the authority to formulate and enforce rules governing the use of state vehicles was given to the Highway Commission. The Motor Pool provided only maintenance and storage for state vehicles. In 1974, an amendment to the law gave the Department of Highways authority to enforce rules concerning state vehicle use. A subsequent amendment designated the Department of Highways the custodian of all passenger-carrying motor vehicles operated out of the Helena area.

At the present time, the department's Motor Pool Unit manages and maintains a fleet of approximately 200 vehicles and is authorized 6 full-time equivalent positions to operate the Motor Pool. The vehicles are parked at a centralized location in the capitol complex. Maintenance of the vehicles is performed by the Motor Pool at the Department of Highway's maintenance shop located in Helena. The following illustration shows the number and type of vehicles that were in the Motor Pool fleet on July 1, 1981.

MOTOR POOL FLEET
(July 1, 1981)

<u>Class No.</u>	<u>Vehicle Type</u>	<u>Number of Vehicles</u>
01	Station Wagon	15
02	Ramcharger (4x4)	13
03	Suburban (½ Ton)	1
05	Subcompact	11
06	Compact	141
07	Pickup (1/2 Ton, 2 Wh Drive)	17
12	Van (1/2 and 3/4 Ton)	9
Total		<u>207</u>

Source: Compiled by the Office of the Legislative Auditor from Motor Pool records.

Illustration 1

The Motor Pool recently purchased 32 new vehicles. Sixteen of these vehicles are equipped with standard transmissions and do not contain air conditioning as do other passenger cars in the Motor Pool fleet. These vehicles will be classified as Class 04 and were not in service at the time of the audit.

The Motor Pool is financed through a revolving fund. The costs of operating the Motor Pool are recovered through rental rates charged to user agencies based on the average operating costs per mile for each class of vehicle. The following illustration lists Motor Pool revenues, expenditures, and operating income for the past three fiscal years.

MOTOR POOL FINANCES

<u>Fiscal Year</u>	<u>Revenues</u>	<u>Expenditures*</u>	<u>Operating Income</u>
1980-81 ¹	\$781,826	\$883,510	\$(101,684)
1979-80 ²	712,542	636,873	75,669
1978-79 ²	464,184	491,663	(27,479)

*Includes prior year expenditures, adjustments, and accruals.

Source: ¹Montana Financial Report

²Office of the Legislative Auditor Report on Examination of
Financial Statements Fiscal Years 1978-79 and 1979-80.

Illustration 2

MOTOR POOL GOALS AND MISSION

The Motor Pool's goals are to provide an economical and adequate mode of transportation through pooling of vehicles and to provide management information necessary to maintain state employee transportation at the lowest possible cost.

The Motor Pool's present mission is to purchase cost-effective vehicles, to provide vehicles for state employee use, to efficiently manage fleet operations, and to maintain the fleet in good working condition.

CHAPTER III

PROVIDING A FLEET OF MOTOR VEHICLES

The Motor Pool provides state agencies with a specific service. Essential to providing this service is determining the adequate number and types of vehicles needed to meet the needs of state agencies. In order to operate an effective and efficient fleet of vehicles procedures and proper policies for vehicle acquisition and replacement are important. The following sections discuss these areas in relation to Motor Pool operations.

SIZE OF THE FLEET

Determining the optimal number of vehicles to operate yearly is a crucial aspect of controlling a vehicle fleet. Operating the correct number of vehicles is one of the primary ways the Motor Pool can provide efficient service and high utilization, while charging reasonable rental rates. The primary purpose of pooling vehicles is to achieve high utilization of vehicles while maintaining a relatively minimum number of vehicles. Under an effective pooling arrangement, the idle periods of one agency can provide vehicles for another agency's use, thus effecting increased utilization of available equipment. Optimal fleet size is a basic component in achieving increased utilization.

The Motor Pool has no formal policy or procedure for determining optimal fleet size. Current policy addresses only peak demand. The Motor Pool attempts to keep enough vehicles on hand to meet all requests for vehicles. The Motor Pool also has a procedure for replacing retired vehicles. According to division personnel, the Motor Pool determines the number of vehicles it needs to replace

each year by dividing the total yearly fleet mileage by 75,000 miles, the expected life of a Motor Pool vehicle. Using the 75,000 mile criteria assumes the fleet will remain at a constant size (as a vehicle reaches its 75,000 mile life expectancy it is replaced by another vehicle).

The following chart notes the number of vehicles to be purchased using the current purchase criteria. The chart also indicates that the Motor Pool consistently purchases fewer vehicles than its replacement criteria determines.

<u>NUMBER OF VEHICLES PURCHASED</u> <u>(Fiscal Years 1977-1981)</u>			
<u>Fiscal Year</u>	<u>Previous Year's Total Fleet Mileage</u>	<u>Number of Vehicles To Be Purchased Using the 75,000 Mile Criteria</u>	<u>Number of Vehicles Purchased</u>
1978	3,898,606	52	48
1979	3,792,992	51	47
1980	3,696,405	49	43
1981	4,163,207	56	23

Source: Compiled by the Office of the Legislative Auditor.

Illustration 3

The difference between the number of vehicles purchased and the number required by Motor Pool criteria is attributable to available funds, not demand.

Need for Evaluation of Demand

Adequate planning for optimal fleet size should involve an evaluation of the daily demand for vehicles in addition to a review of vehicle usage. Determining high and low demand periods during the year can help management project agencies' Motor Pool vehicle needs.

We found that basing the number of vehicles that are needed solely on the number of miles driven was an inadequate indicator of vehicle demand. The number of miles driven and the number of cars necessary to satisfy user demands are not related. For example, a vehicle may be driven 50 miles or 300 miles in an 8-hour period, yet the demand for the vehicle is the same in both cases.

Two types of demand information are the number of vehicles used per day and the number of trips taken per vehicle. Although the division could gather this information, it has not. Therefore, the information is neither used as an aid in planning nor as a means of maintaining the proper number of vehicles. We examined this demand information for all vehicles for fiscal year 1980-81 and compared the number of vehicles used per day to the total number of vehicles available in each class. The results are shown in Illustration 4.

AVERAGE DAILY VEHICLE UTILIZATION - BY CLASS
(Fiscal Year 1980-81)

<u>Class Number</u>	<u>Type of Vehicle</u>	<u>Average Percentage of Available Vehicles Used Each Day</u>
01	Station Wagon	72%
02	Ramcharger (4 x 4)	59%
05	Subcompact Passenger Car	81%
06	Compact Passenger Car	78%
07	Pickup Truck - $\frac{1}{2}$ Ton	59%
12	Van (5 & 8 Passenger)	75%

Source: Compiled by the Office of the Legislative Auditor.

Illustration 4

The comparison indicates a relatively significant percentage of Motor Pool vehicles are sitting idle. We noted during our review of vehicle trips that at no time did the Motor Pool have in use 100 percent of the fleet, which is an indication of low fleet utilization and resulting higher costs. Illustration 5 further illustrates the difference between the number of vehicles in use each week and the number of vehicles in the Motor Pool inventory (Fiscal year 1980-81).

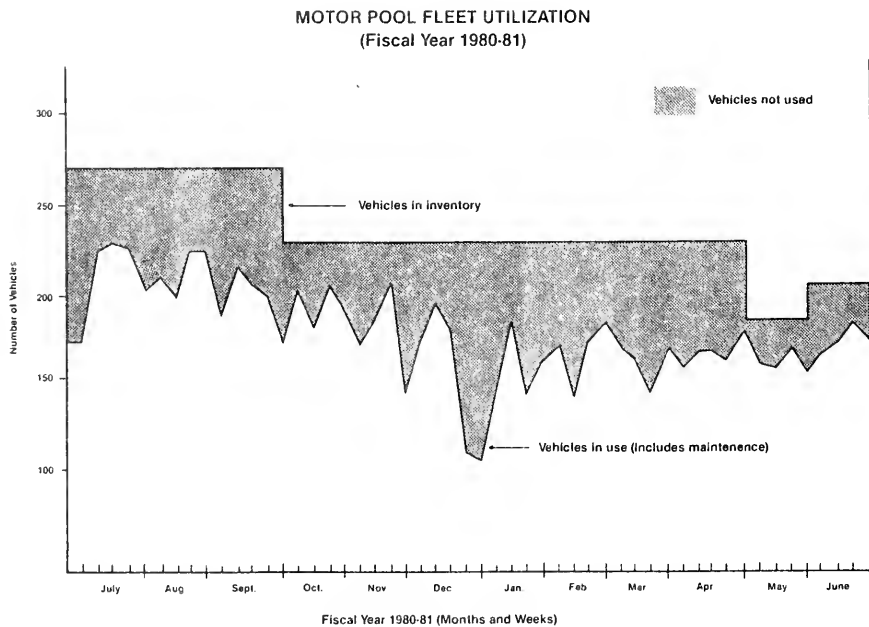


Illustration 5

More Realistic Utilization Criteria

As indicated in Illustrations 4 and 5, the Motor Pool is not pursuing the most economic means of meeting vehicle requests. In trying to meet 100 percent of daily requests, a greater number of vehicles is required during high demand periods. In low demand periods, however, many vehicles sit idle because of the large inventory which was established to satisfy high demand. Proper fleet size would minimize the number of vehicles sitting idle, yet provide enough vehicles to meet most requests. The Motor Pool should reevaluate its policies on fleet size and set a more realistic goal of meeting a less than 100 percent level of vehicle requests.

For example, Illustration 6 compares the number of class 06 vehicles (compact passenger cars) used daily to the number of class 06 vehicles available for use. Class 06 was used because it is the largest vehicle class and incurs the most mileage and the most trips of all vehicle classes. The chart indicates a discrepancy between the average number of vehicles actually used each month and the number of vehicles available for use in a given month. If the Motor Pool reduced its vehicle inventory, it could still meet the average daily demand for vehicles most of the time. As illustrated by the dotted horizontal line, the Motor Pool could reduce the number of class 06 vehicles by approximately thirty and could still meet 100 percent of vehicle requests two-thirds of the time.

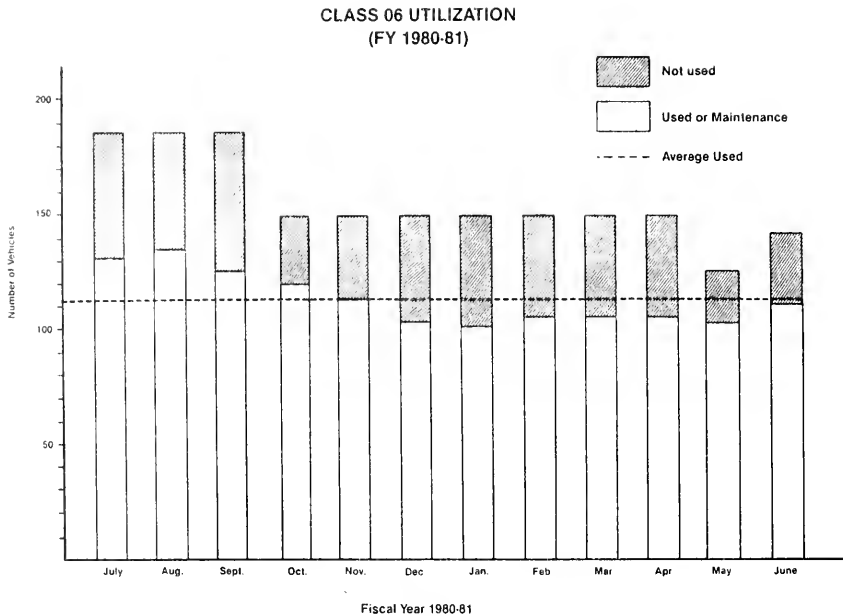


Illustration 6

A system designed to meet less than 100 percent of demand would require that some state employees on occasion use alternative sources of transportation in conducting state business. Employees can choose from vehicles of different classes in the Motor Pool lot when a vehicle from a particular class is unavailable, or can use the services of commercial rental car companies. Although the use of these sources of transportation incurs slightly greater costs than the use of a regular Motor Pool passenger car, the increased

costs must be weighed against the need for the Motor Pool to purchase new vehicles to satisfy demand during occasional high use periods.

Employees can also use their personal vehicles to perform state business on an occasional basis when Motor Pool vehicles are not available. A review of agency personal vehicle mileage records indicated that personal vehicle use by Helena-based employees totaled approximately 1.3 million miles for fiscal year 1981. This represents 25 percent of all Helena-based travel by state employees and indicates a willingness of agency personnel to use their personal vehicles for state business. Interviews with agency central services administrators revealed that some agencies do not discourage personal vehicle use because the reimbursement rate for personal vehicle use (17¢/mile when Motor Pool vehicles are available, 20¢/mile when not available) is less than the rental rate (21.5¢/mile) for Motor Pool vehicles. State employees using personal vehicles are insured through state liability insurance coverage for bodily injury and property damage, and if the private vehicle is used occasionally the employee's own private coverage may also provide insurance depending on the individual policy.

RECOMMENDATION #1

WE RECOMMEND THE MOTOR POOL:

- A. ADOPT A FORMAL SYSTEM TO DETERMINE DEMAND FOR MOTOR POOL VEHICLES BASED UPON DAILY AND MONTHLY VEHICLE UTILIZATION.

B. SET A POLICY OF MEETING LESS THAN 100 PERCENT
OF USER VEHICLE REQUESTS, AND ESTABLISH FLEET
SIZE BASED UPON THIS POLICY.

CHAPTER IV

MANAGING THE FLEET

In order for an organization to function efficiently, it must adequately perform basic management functions. The following sections discuss the Motor Pool's management of the fleet. The concerns in this chapter address the use of management information and control of fleet operations.

MANAGEMENT INFORMATION

Proper management of the Motor Pool fleet requires the development and use of appropriate vehicle information. A coordinated flow of information to Motor Pool personnel is essential for making effective decisions concerning fleet operation. The Motor Pool has several sources of information available to help make these decisions.

Vehicle Monthly Mileage Report

The monthly printout is a computer-generated document which is intended to list the miles driven by each Motor Pool vehicle for the past 12 months. The Motor Pool uses the mileage printout as an aid in determining the number of vehicles the division needs to purchase and as a means of monitoring the mileage traveled by Motor Pool vehicles in all classes. However, inaccuracies in the report reduced Motor Pool management effectiveness in evaluating vehicle utilization. The printout had been reporting 13 months vehicle usage instead of usage for a 12-month period. The mileage for two months was being reported in one month and, consequently, the reported total vehicle mileage was higher than what was actually driven. For example, the Motor Pool printout reported that the

fleet had traveled a total of 4.3 million miles for fiscal year 1980-81. However, the actual total mileage was approximately 3.9 million miles. Motor Pool personnel using the report did not have proper information to determine monthly vehicle utilization. During the audit the inaccuracies in the printout were corrected by the division.

By using the mileage report, these personnel believed that peak usage for vehicles occurred in June. When we reconstructed monthly vehicle utilization from Motor Pool trip tickets we found the greatest utilization occurs in August and September. Total vehicle miles, number of trips, and days used reached their highest peak in this period.

The printout could be a valuable planning document by providing information on high and low mileage periods by different vehicle classes and for specific vehicles.

The printout's design limits its usefulness because it reports only vehicle mileage. Although mileage utilization is important, other utilization information should be included. The number of days each vehicle is used per month, the number of vehicles used per day, and the number of trips taken per vehicle are important indicators of vehicle use.

Motor Pool should expand the program to include the number of vehicles in use each day, the number of days each vehicle is used per month, and the number of trips per vehicle as well as vehicle mileage. This information would provide information to more accurately assess utilization of and the demand for vehicles.

Proper Use of Management Information

The consistent review and coordination of vehicle information by Motor Pool personnel is essential to efficient operations. To be effective, Motor Pool management must distribute information to the appropriate Motor Pool staff.

During the audit we noted that upper management did not direct mileage utilization information to the Motor Pool Unit manager or dispatcher, the two personnel who have direct contact with the fleet and are responsible for assigning vehicles. To provide efficient utilization of Motor Pool vehicles, utilization information should have been directed to the manager and particularly, the dispatcher who checks out the vehicles. Since completion of the audit, the Unit Manager has been receiving the mileage printout every two months. However, if the information is to be used most effectively it should be directed immediately to the manager for use in assigning vehicles.

RECOMMENDATION #2

WE RECOMMEND MOTOR POOL:

- A. INCLUDE IN THE UTILIZATION PRINTOUT THE NUMBER OF VEHICLES USED PER DAY AND THE NUMBER OF TRIPS PER VEHICLE.
- B. SEND UTILIZATION INFORMATION IMMEDIATELY TO THE UNIT MANAGER.

RESERVED VEHICLES

The Motor Pool policy manual states that no Motor Pool vehicles are to be permanently assigned. During fiscal year 1981, 26 Motor Pool vehicles were reserved (assigned to particular individuals or agencies) on a permanent basis. These vehicles were consistently used by the same agency or individual. A recommendation from our 1978 audit stated that Motor Pool should establish controls to ensure that vehicles are not permanently used by agencies. The department responded that controls have been initiated since July 31, 1979 to tighten the use of permanently assigned units. However, the Motor Pool continues to reserve vehicles for specific agencies.

The reserving of Motor Pool vehicles creates several problems. We noted that reserved vehicles were underutilized compared to the rest of the fleet. In fiscal year 1980-81, these vehicles were used an average of 178 days, whereas in-pool vehicles were used an average of 231 days. This indicates that reserving vehicles requires vehicles to sit idle in order that they may be available to the same user.

Certain vehicles are used almost exclusively by agencies for periods ranging up to a full year. Motor Pool vehicles fitted with special equipment were noted to be of particular concern. For example, the Motor Pool purchased 19 new AMC Concords in 1981. Since July 1, 1981 the Highway Department accounted for 70.1 percent of the Concord miles, yet their share of total agency Motor Pool miles amounts to only 28.4 percent. We noted that 15 of the 19 new Concords had been equipped with Highway Department

radios. The Highway Department transferred these radios from other Motor Pool cars to the new Concords. The average odometer reading of the vehicles originally housing the radios before being transferred was 38,803 miles. One of the transferred radios was previously in a 1980 vehicle with a year-end odometer reading of 9,807 miles.

These practices give the impression that the Motor Pool is assigning vehicles with the purpose of reserving newer vehicles for Department of Highways use. Section 2-17-411, MCA, states the ". . . motor pool division is the custodian of all motor vehicles operated out of the Helena area . . . which do not carry specialized equipment that would render them unfit for interagency use." In effect, by placing radios in the newer vehicles, the Motor Pool is reserving newer vehicles for certain agencies, particularly the Department of Highways.

The intent of the Motor Pool is to provide vehicles to all user agencies. If specially equipped vehicles are truly needed, then these vehicles should have been purchased by the Department of Highways and not from Motor Pool funds.

Special equipment should no longer be placed in Motor Pool vehicles. Putting special equipment such as two-way radios in the vehicles and then reserving them renders the vehicles less available for interagency use. The vehicles, in effect, cease to be pooled vehicles for general use, and are handled as permanently assigned vehicles.

In addition, by reserving the newer vehicles for the Highway Department, the Motor Pool helps promote a poor image to other

user agencies. Since a large majority of the newer vehicles are reserved, other user agencies will be issued older vehicles. In interviews with other agency personnel, we noted that this policy has helped to create a negative image of the Motor Pool among state employees.

RECOMMENDATION #3

WE RECOMMEND MOTOR POOL:

- A. ESTABLISH A POLICY TO PREVENT VEHICLES FROM BEING RESERVED OR PERMANENTLY ASSIGNED.
- B. DISCONTINUE PLACING SPECIAL EQUIPMENT IN MOTOR POOL VEHICLES.

STATIONING VEHICLES OUTSIDE HELENA

The Motor Pool is presently conducting a pilot study to determine if placing Motor Pool vehicles in cities outside of Helena would be an efficient method of providing transportation to Helena-based state employees performing state business there. Two passenger cars were placed at each of the Department of Highways' division offices in Billings, Bozeman, and Missoula. The intent of the program is to provide inexpensive transportation for state employees arriving from Helena by plane or van pool who have state business in these cities.

A review of the utilization figures for the pilot study vehicles indicated that these vehicles are being used significantly less than in-pool vehicles. The pilot study cars average 133 miles per month, considerably less than the 1,352 miles per month incurred

by same class in-pool vehicles. A review of pilot study vehicles' operating costs indicated that none of the vehicles are recovering costs. For the period July 1 to September 30, 1981, the six cars incurred an operating income loss of about \$1,221.

In reviewing this program, we found that university motor pools in each of these cities provide transportation for state employees including rides to and from the airport. Rental agencies also provide transportation and offer a state government discount to employees using their vehicles.

The legislative intent of the Motor Pool is to provide transportation to Helena-based state employees and to pool vehicles. The pilot program is contrary to these requirements. The program is also incurring losses because of low utilization. A prior 1973 audit stated that the establishment of Motor Pool locations outside Helena increased costs to user agencies and recommended that motor pools outside Helena be discontinued. Based upon the same criteria, we recommend that the Motor Pool discontinue the pilot program.

RECOMMENDATION #4

WE RECOMMEND MOTOR POOL DISCONTINUE THE PILOT CAR PROGRAM.

MAINTAINING THE FLEET

Maintaining the vehicles is an integral part of Motor Pool operations. Proper maintenance of the Motor Pool vehicles will provide for safe and cost-effective operation of the fleet. Adequate maintenance will also increase the resale of the vehicles.

Vehicles retired from the fleet are sold at a public auction held by the Department of Highways, or the vehicles may be purchased prior to the auction by governmental agencies. The funds derived from the sale are used to help purchase new vehicles. Therefore, the better maintained the vehicles, the higher the resale value.

To determine proper maintenance and servicing of Motor Pool vehicles, we reviewed division records and documented division policy to verify that maintenance policy was properly implemented. Our review examined the areas of routine maintenance of Motor Pool vehicles, service intervals, users' comments, and warranty repairs. We also performed a test drive and inspection of a sample of Motor Pool vehicles.

Since our audit in 1978 reviewed the maintenance function of the Motor Pool, several changes have occurred regarding motor vehicle maintenance. Previous maintenance work on Motor Pool vehicles was performed at the maintenance shop located at the county fairgrounds or through contracts with private businesses. In 1981, a new maintenance facility located adjacent to the Highway Department building was completed and Motor Pool vehicles are now routinely repaired and serviced there. The availability of better working conditions, maintenance equipment, and more available space has facilitated in-house vehicle maintenance and, consequently, all private service and maintenance contracts were terminated. All Motor Pool vehicle maintenance is now performed at the new facility, except for major body repairs and wheel alignment.

In our review, all of the vehicles we examined for maintenance work were repaired at the old maintenance shop or under contract to private firms. We were not able to compare the costs of maintaining vehicles at the new shop because information on vehicles repaired at the new facility was not yet available during the time we conducted our review.

Vehicle Service

To determine whether the Motor Pool was complying with the policies for the servicing of vehicles, we randomly sampled 36 out of the 187 vehicles which were in service the entire fiscal year. We recorded, from division maintenance records, all the oil and filter changes, lubrications, and preventive maintenances. To determine if the Motor Pool has been following their criteria (at the time of the audit oil and filter changes, lubrications every 3,000 miles, and preventive maintenance every 12,000 miles) we established allowable upper and lower mileage limits in which service changes could be made. We found the Motor Pool has been following their criteria for all of the recommended service changes.

We then reviewed the adequacy of the service intervals used for Motor Pool vehicles. We contacted several states, a car rental agency, and national automobile associations to determine their recommended service intervals. The rental agency, automobile associations, and some states use, or suggest, the manufacturer's recommendations.

Currently, the Motor Pool makes oil changes to class 01 and 07 vehicles every 5,000 miles and its class 12 vehicles every 3,000 miles. Manufacturer's recommendations for those vehicles making

up the fleet state that service intervals for all Motor Pool vehicles could be changed to 7,500 miles. If all the oil change service intervals were changed to the manufacturer's recommendations of 7,500 miles, the Motor Pool could save approximately \$5,000 in service costs per year.

We also noted that the automobile associations and the service manuals contained in Motor Pool vehicles made recommendations for lubrication intervals different from Motor Pool's present policy. The manufacturer's recommendations indicated that passenger vehicles should be lubed approximately every 15,000 miles and trucks and vans should be lubed approximately every 22,500 miles. The Motor Pool should consider changing their lubrication intervals for passenger vehicles and trucks and vans as an additional means of reducing service costs.

RECOMMENDATION #5

WE RECOMMEND MOTOR POOL:

- A. CHANGE SERVICING INTERVALS FOR OIL CHANGES TO MANUFACTURER'S RECOMMENDATIONS OF 7,500 MILES FOR ALL VEHICLE CLASSES.
- B. CHANGE THEIR LUBRICATION INTERVALS FOR ALL VEHICLE CLASSES TO BETTER REFLECT MANUFACTURER'S RECOMMENDATIONS.

Users' Comments

As part of its maintenance policy, the Motor Pool has created a system whereby users of pool vehicles are encouraged to comment

on problems with the operation of the vehicle. Motor Pool personnel review these comments to identify vehicle problems and initiate appropriate repairs. In order to determine whether users' comments are resulting in repairs, we selected a random sample of Motor Pool vehicles and reviewed the comments and their corresponding repairs.

We divided the problems noted on users' comments into three categories: safety, vehicle performance, and comfort problems. We then established whether the resulting repairs were timely (before checking out the vehicle again), untimely (after the vehicle is checked out again), or if there was no record of a repair. The following illustration shows the results.

TIMELINESS OF REPAIRS

	<u>Timely</u>	<u>Untimely</u>	<u>No Record Of Repairs</u>
Safety	28%	19%	53%
Performance	19%	23%	58%
Comfort	9%	5%	86%
All Repairs	21%	18%	61%

Source: Compiled by the Office of the Legislative Auditor.

Illustration 7

This table indicates that users' comments are not being used to identify vehicle problems and repair them on a timely basis. In our 1978 audit, we recommended that the department revise its system of identifying needed repairs to assure that repairs are made on a timely basis. The department's response stated that every user complaint is checked and it is the Motor Pool manager's decision to determine if corrections are necessitated. Our review indicates that users' comments still are not being effectively utilized

by the division to initiate repairs. In fact, the Motor Pool's present system of reviewing users' comments has deteriorated. Only 39 percent of the comments ever resulted in documented repair, compared to the 1978 audit findings of 65 percent of user comments resulting in repair. We observed in one case, the same comment was made by six different users about the same vehicle over a five-month period prior to a repair being made. Several times, the same comment was made about the same vehicle before repairs were made. Of the 117 comments reviewed, 79 percent were not repaired before the vehicle had been checked out again or they were never repaired.

At present, the division has no method to continually keep track of users' comments. Since that portion of the trip ticket, upon which users' comments are recorded, is sent to the department's accounting division, the Motor Pool cannot retain them to identify continual vehicle problems.

Reissuance of vehicles prior to repair of defects may increase the danger to users and can increase operating costs. It also gives the Motor Pool a poor image, ultimately reducing the use of Motor Pool vehicles.

The Motor Pool should develop a system which provides for a recording of a description of the vehicle defects noted in the users' comments, the number of the vehicle being commented upon, and the date of each user comment. This would allow the Motor Pool to review the types of repairs needed for a specific vehicle or vehicle class. It would also provide a means for keeping track of recurring vehicle problems, thus preventing the same comment from being made several times before repairs are made.

RECOMMENDATION #6

WE RECOMMEND MOTOR POOL:

- A. DEVELOP A SYSTEM TO RECORD AND MONITOR ALL USERS' COMMENTS.
- B. USE THIS SYSTEM TO ASSURE PROPER REPAIRS ARE MADE.

Test Drive and Inspection

To determine if routine maintenance and proper service of Motor Pool vehicles was performed, we test drove and inspected a random sample of 15 vehicles. The sample included at least two vehicles from each vehicle class.

Our inspection included the following areas of routine maintenance:

1. Tire wear -- correct tire pressure, tire replacement and tread wear;
2. Fluid levels -- automatic transmission fluid, power steering fluid, radiator coolant, brake fluid, windshield washer fluid, and battery water level; and
3. Other areas -- belts, hoses, lights, wipers, gauges, etc.

In the 1978 audit inspection, the review noted problems with excessive tire wear, frequent tire replacement, improper tire pressure, and low levels of all fluids. In our review, we determined that the overall maintenance of the vehicles had improved from 1978 and the only problem area was fluid levels. We found that the vehicle fluids were frequently not kept at proper levels. The fluid was below allowable levels in 30 percent of the vehicles

equipped with power steering. We also found the transmission fluid low in 40 percent of the vehicles.

The problem in maintaining proper fluid levels may be attributable to the scheduling of staff work assignments (see page 47). As part of their present work duties, servicemen are completing vehicle paperwork during the busiest work periods. This limits the amount of time servicemen have to perform the routine fluid level checks. To assure safe operation and prevent unnecessary repairs, fluid levels should be properly maintained.

RECOMMENDATION #7

WE RECOMMEND MOTOR POOL IMPLEMENT PROCEDURES TO ENSURE VEHICLE FLUID LEVELS ARE MAINTAINED PROPERLY.

CHAPTER V

ADEQUATE FUNDING OF OPERATIONS

The Motor Pool is financed through a revolving fund. The costs of operations are recovered through rental rates charged to the agencies using the vehicles. It is the intent of the rate system to have the operator of the vehicle pay for all costs incurred by the operator in using the vehicle. The Motor Pool has developed two methods to attempt to recover costs. Both methods use a flat rate plus a mileage rate basis for establishing rates. One method is a rental rate based upon miles traveled. The other is a leasing system.

In reviewing the rate systems we found problems with rate calculation, documentation, monitoring of costs, and in the total concept of how agencies are charged for use of vehicles. The sections in this chapter present a background on the rate structure and then discuss specific inadequacies in the system.

RENTAL RATES

Mileage-based Rate

Section 2-17-431, MCA, states that the ". . . Motor Pool Division may charge the individual state agencies using the motor vehicles the actual costs for administration and their maintenance, services, storage and replacement." Section VI of the Motor Pool Rules and Regulations states that vehicle operating costs "will be passed to the user departments by a mileage charge" and "the mileage charge for the vehicles will cover both fixed and variable costs of operation."

The types of variable and fixed costs used by the Motor Pool to determine rental rates and the total costs of operating the vehicles for fiscal year 1980-81 are indicated in the following illustration.

MOTOR POOL VARIABLE AND FIXED COSTS

	<u>Total</u>
<u>Variable Costs</u>	
Oil & Grease	\$ 9,340
Direct Labor	40,289
Parts & Accessories	43,010
Tires	15,300
Fuel	240,534
 <u>Fixed Costs</u>	
Administration	55,330
Insurance	47,718
Non-Reimbursable Losses	2,187
Operations Overhead	53,904
Depreciation	147,780
 <u>Additional Costs</u>	
Building & Site Fee	<u>19,300</u>
 Total Cost	 \$674,692

Source: Compiled by the Office of the Legislative Auditor from Motor Pool records.

Illustration 8

A rental rate for each class of vehicle is calculated by dividing the total fixed and total variable costs for that class by the number of vehicle miles driven. These rates are added to the building and site fee (the Motor Pool Unit lot) and the vehicle class replacement fee to establish a rental rate for each vehicle class. The following illustration shows the current rates per mile charged for each vehicle class.

MOTOR POOL RENTAL RATES

<u>Class Number</u>	<u>Type of Vehicle</u>	<u>*Rate/Mile</u>
01	Station Wagon	\$.2350
02	Ramcharger (4 X 4)	.2875
05	Subcompact Passenger Car	.2125
06	Compact Passenger Car	.2150
07	Pickup Truck - ½ Ton	.2575
12	Van - 5 & 8 Passenger	.3000

*Includes replacement cost

Source: Compiled by the Office of the Legislative Auditor.

Illustration 9

Since some vehicles are used for short trips, fixed costs are not recovered by using only a mileage rate; therefore, the Motor Pool has established a minimum daily charge of five dollars to ensure that operating costs are recovered. If a vehicle averages enough miles each day to incur costs that exceed the minimum five dollar daily charge, then only the charge based upon the miles is assessed to the user agency.

Lease Rates

The Motor Pool also leases vehicles to agencies for long periods of time. Motor Pool policy states if an agency "determines the need for a vehicle assignment for various daily trips in Helena, a vehicle may be leased at the discretion of the administrator of the Motor Pool and Equipment Division on a monthly basis." Motor Pool personnel stated that the demand for leased vehicles continues to increase each year.

For fiscal year 1980-81, the Motor Pool leased 71 vehicles to 13 state agencies. The average length of a lease was approximately 10 months. The following table shows the agencies operating

leased vehicles as of September 1981, and the average odometer readings for these vehicles.

MOTOR POOL LEASE AGREEMENTS
(As of September 1981)

<u>Agency Name</u>	<u>Number of Leased Vehicles</u>	<u>Average Odometer Reading When Leased Out</u>
Department of Highways	11	53,383
Department of Administration	7	69,746
Department of Natural Resources	1	66,967
Department of Revenue	1	63,475
Department of Livestock	1	62,740
Department of Military Affairs	1	55,033
Office of Superintendent of Public Instruction	1	14,982
Commissioner of Higher Education	1	4,156
TOTAL	24	

Source: Compiled by the Office of the Legislative Auditor.

Illustration 10

The Motor Pool established lease rates for each class of vehicle. The lease vehicle rate is a combination of a fixed amount per month, plus a mileage charge per vehicle class. The following illustration indicates the lease rates currently being charged for each vehicle class.

MOTOR POOL LEASE RATES

<u>Class Number</u>	<u>Type of Vehicle</u>	<u>Effective July 1, 1981</u>	
		<u>Monthly Rate</u>	<u>Rate Per Mile</u>
01	Station Wagon	\$125	\$.1775
02	Ramcharger (4x4)	150	.2350
05	Subcompact Passenger Car	125	.1650
06	Compact Passenger Car	125	.1650
07	Pickup Truck - $\frac{1}{2}$ Ton	100	.2075
12	Van - 5 and 8 Passenger	150	.2175

Source: Compiled by the Office of the Legislative Auditor from Motor Pool records.

Illustration 11

RATE CALCULATIONS

Documentation and Consistency

The procedures for calculating Motor Pool vehicle rental and lease rates for the period beginning July 1, 1981, are inadequately documented. Our review noted specific problems related to the lack of documentation of procedures resulting in inconsistent rate calculation. We found that current methods produced mathematical inaccuracies in rate computations and lack of consistency in calculating rates for each vehicle class. In addition, certain charges included in the rates were not justified by supporting documentation. The inconsistencies will affect Motor Pool operation by decreasing FY 1981-82 revenue by approximately \$3,500.

Without a documented procedure, the Motor Pool cannot be confident that rates are established on a consistent basis. Since rates are often recalculated more than once for each fiscal year, proper documentation can provide specific data on changes in fixed and variable costs and the reasons for readjustment of rates. Also, the use of a standardized procedure for calculating rates will help increase mathematical accuracy of rate computation and promote efficient management.

In our prior 1978 and 1980 audits, we recommended that the department document procedures for rate calculations and include the procedure in department accounting manuals. The department responded that it would prepare written documentation of rate calculation and would add these procedures to the accounting manuals. However, no procedure has been documented or included in department accounting or operations manuals. The department

has again responded that documentation of procedures used in calculating rates will be included in either the accounting manual or an operations manual.

RECOMMENDATION #8

WE RECOMMEND MOTOR POOL DOCUMENT PROCEDURES FOR RATE CALCULATION.

Depreciation Calculation

One of the factors used in calculating the overall rental rate is the depreciation on motor vehicles. The Motor Pool's present method of computing depreciation does not properly reflect the value of depreciated vehicles. Depreciation factors are determined for each vehicle by the standard formula: purchase price minus resale value divided by 75,000 miles (the expected life of the vehicle). This depreciation method expects the resale value of a Motor Pool vehicle to be 10 percent of purchase price.

In reviewing the Motor Pool's auction records, we observed that the resale price of vehicles most recently sold at auction consistently exceeded 10 percent of purchase price. For the May 1981 auction the total sales for Motor Pool vehicles amounted to approximately \$38,000. Using the present depreciation methods based on 10 percent of purchase price the value of these vehicles was established at \$13,684. A resale value which is closer to 25 to 30 percent of the purchase price would be a more appropriate figure to use. Using a value more representative of the actual resale price would prevent user agencies from being charged for depreciation costs over and above the actual depreciation.

Motor Pool should adjust its residual values to more closely approximate actual resale values of the vehicles sold at auction. By using historical auction values, the average resale prices per vehicle class can be estimated. With this information, the Motor Pool can calculate more accurate depreciation for each vehicle.

RECOMMENDATION #9

WE RECOMMEND MOTOR POOL REVISE ITS METHOD OF DEPRECIATING VEHICLES BY ADJUSTING RESIDUAL VALUES TO MORE CLOSELY APPROXIMATE VALUE UPON DISPOSAL.

Replacement Charge

During the life of a Motor Pool vehicle, user agencies are paying depreciation costs which will be used to purchase new vehicles. The funds collected through depreciation, plus the funds collected at auction of the vehicle, will approximately equal the original purchase price of the vehicle. However, since three or four years will have elapsed since vehicle purchase, the cost of a new vehicle to replace the retired one will have increased due to inflation. A review of purchase prices for Motor Pool vehicles bought between 1976 and 1981 indicates a 12 percent average annual increase in vehicle purchase price. To offset the increase in cost the Motor Pool includes a vehicle replacement charge in computing rental rates. The replacement charge varies for each vehicle class and is based on vehicle class use and the percentage of new vehicles in each class.

In reviewing rental rate calculations we found that the Motor Pool is not collecting the proper replacement rates. For example, the Motor Pool determined that it needed to charge three cents per mile for replacement for compact passenger cars. In actuality, the Motor Pool is only collecting one and one-half cents per mile in replacement. The remaining one and one-half cents per mile is being used to recover regular depreciation costs. Thus, for this class of vehicle the Motor Pool will collect one half of the amount of funds it originally calculated it will need to replace this class of vehicles.

An example of this situation is that the Motor Pool estimated that the class 06 vehicles will depreciate \$168,700 in fiscal year 1981-82. At its current rate of charge for depreciation, it will collect \$136,500 on these vehicles. This means it must collect \$32,200 in additional depreciation charges. However, instead of increasing the depreciation rate accordingly, the Motor Pool decided to recover these funds from the replacement charge. At 3 cents per mile the Motor Pool should collect \$82,500 in fiscal year 1981-82 in replacement. But, it reduced this amount by using a portion of the replacement charge to offset the lost revenue from the depreciation charge. By rounding off the numbers during rate calculation, one half of the 3 cents per mile replacement charge will go to depreciation, thus shorting the replacement funds by \$41,250.

The following table shows the replacement rates which were indicated as being necessary and the actual replacement rate being collected.

MOTOR POOL REPLACEMENT RATES
Effective July 1, 1981

<u>Class Number</u>	<u>Type of Vehicle</u>	<u>Necessary Replacement Cost Per Mile</u>	<u>Actual Replacement</u>
01	Station Wagon	.0400	.0275
02	Ramcharger (4x4)	.0400	.0350
05	Subcompact Passenger Car	.0300	.0175
06	Compact Passenger Car	.0300	.0150
07	Pickup Truck - $\frac{1}{2}$ Ton	.0400	.0400
12	Van - 5 and 8 Passenger	.0400	.0275

Source: Compiled by the Office of the Legislative Auditor from Motor Pool records.

Illustration 12

For all classes of vehicles the replacement charges were to generate approximately \$118,000; however, due to Motor Pool procedures only \$67,500 will be generated.

We noted an additional problem in Motor Pool's calculations for the replacement rate for vehicle class 12. Motor Pool personnel computed a replacement rate of .04 for class 12 vehicles; however, when the rental rate was determined for this class, a .03 replacement charge was mistakenly used to compute the overall rental rate. This will result in a loss of income of approximately \$1,400 for fiscal year 1981-82 for class 12 vehicles.

RECOMMENDATION #10

WE RECOMMEND THE MOTOR POOL CALCULATE REPLACEMENT RATES USING ONLY THOSE CHARGES DIRECTLY RELATED TO THE COSTS OF VEHICLE REPLACEMENT.

Lease Rate Calculation

As mentioned previously, the Motor Pool will lease vehicles for extended periods of time. During our review, we noted several areas of concern with respect to lease rate calculation.

Criteria for computing lease charges are based on the premise that the monthly earnings for a lease vehicle exceed the monthly earnings for a pool vehicle that is rented on a mileage-based rate. However, the monthly charge for the lease is determined arbitrarily and calculation of the rate per mile charge for the lease is based upon an incorrect assumption.

Motor Pool calculates the estimated monthly earnings for mileage rate vehicles by multiplying the average yearly miles traveled by all vehicles in each class times the current rental rate for each vehicle class and then dividing that result by twelve. Motor Pool personnel then establish a fixed monthly lease charge and a lease mileage rate.

For example: class 06 vehicles average 24,635 miles per year. The rental rate for non-lease vehicles is 21.50 cents per mile. Therefore, a rental (non-lease) vehicle should produce revenues of $24,635 \times .2150$ or \$5,296 per year. Dividing by 12 gives a monthly average of \$441. For a lease vehicle a fixed monthly charge is established at \$125, thus the remaining \$316 ($\$441 - \125) must be made up through mileage charges. Dividing \$316 by average monthly mileage (2053) gives .1540 per mile. For the actual lease rates in Illustration 11 this mileage figure was arbitrarily increased to .1650 so that the leased car would generate more revenue. Thus, the factors used in calculating monthly

earnings, the monthly charge and the mileage rate, are all determined from rental (non-lease) vehicle data. This allows the Motor Pool to set rates arbitrarily without considering the actual costs incurred by lease vehicles.

Using rental vehicle data to calculate lease rates creates a problem. The Motor Pool is assuming that the lease vehicles are being driven as far as rental vehicles. We noted in a previous discussion that lease vehicles are utilized significantly less than in-pool vehicles. Therefore, Motor Pool will not realize the revenue it estimated it would receive through the mileage rate. In fact, lease vehicle mileage is approximately one-third of that of rental vehicles, thereby producing one-third the expected revenue.

The Motor Pool should formulate criteria to be used in calculating monthly charges and mileage rates for leased vehicles. The appropriate lease rate should be based on recovering fixed costs on a monthly basis and variable costs through the mileage rate for each class of vehicle. The Motor Pool should not base its rates on the average costs incurred by rental vehicles. It should develop a system to calculate rates based on the actual fixed and variable costs of its lease vehicles.

RECOMMENDATION #11

WE RECOMMEND MOTOR POOL SET RATES USING CRITERIA BASED ON RECOVERING ACTUAL COSTS FOR EACH CLASS OF LEASED VEHICLE.

ALTERNATIVE RATE STRUCTURE

The method of charging user agencies for operation of Motor Pool vehicles has changed several times since the initial per mile rate system. The Motor Pool recognized that the simpler per mile rate was not recovering the costs of operating vehicles used for short trips. This was causing an increase in rental rates to compensate for the loss of revenue, and high mileage users were "subsidizing" lower mileage users.

To return some equity to the system the Motor Pool established a policy of leasing vehicles to agencies which need vehicles for daily short trips in Helena. Fixed costs were recovered through a monthly charge and variable costs through a mileage rate. However, there were still those incidences where short trips occurred without lease agreements. The next change was the establishing of a minimum daily charge of \$5 to attempt to recover the fixed costs incurred during these short trips.

This move toward an equitable rental rate system, which will produce revenue to cover both fixed and variable costs, indicates that an eventual change to a split rate system for all users may be the ultimate solution. To better illustrate that a split rate system may be most appropriate, a discussion of leasing problems and how a split rate system would solve the problems follows.

Leasing Criteria and Monitoring

During our review we noted that the current administration of leasing operations is removing vehicles from the vehicle pool and is resulting in low utilization contrary to the concept of pooling.

We found that the Motor Pool has not formulated a policy establishing criteria for assigning or monitoring lease vehicles even though our 1978 audit recommended that the Motor Pool formulate such a policy. The Motor Pool has no written criteria for minimum utilization of lease vehicles and does not monitor vehicle utilization. We specifically noted that:

- Utilization for lease vehicles is significantly less compared to the utilization of the rest of the fleet. Lease vehicles average approximately 24 miles per day, whereas in-pool vehicles are driven an average of 99 miles per day.
- There are no provisions for a periodic review of lease rates and the income generated by lease vehicles.
- Since Motor Pool lease agreements do not state how long they are intended to last, there is no method to determine future vehicle availability. Not until lease vehicles are returned to the pool are termination dates written on the agreements.
- Contrary to the reason for establishing leasing, we found that 35 percent of the 71 lease agreements for fiscal year 1980-81 were written for out-of-Helena use, by non-Helena-based employees. Since July 1, 1981, four additional lease agreements have been signed by the Motor Pool for use by non-Helena-based agencies.

Because of current Motor Pool policy, the Motor Pool user does not benefit from the full effect of pooling vehicles. Without specific criteria for determining assignment and without a method of monitoring lease vehicles, the Motor Pool has no means of preventing nonessential lease agreements, and has no means of determining the user agency's need for the vehicle and if the vehicle could be better used in the pool. Changing the Motor Pool's policy on leasing and implementation of an alternative rate structure could be a solution to the problems with controlling and monitoring the fleet.

Split Rate

As noted previously, present rental rate policy does not contribute to vehicle pooling. However, charging all users on a split rate system would eliminate problems with leases and would recover fixed costs incurred on short trips, yet maintain the pooling concept.

Commercial rental agencies have been using a split rate system to recover costs for some time. They charge a fixed amount per day plus so much per mile. For example, a split rate could be \$24 per day and \$.09 per mile. This method is sound in that fixed costs are covered by the daily charge and the variable expenses are covered by the mileage rate.

The Motor Pool has determined the fixed and variable costs associated with operating Motor Pool vehicles. These are noted in Illustration 8. Using available information the Motor Pool could determine the average number of days per year a vehicle is used and the average number of miles traveled per year for each class. This information, combined with historical costs, projected increases and established costs, can be used to establish rates. For example: A split rate of \$8 per day and \$.065 per mile would have recovered costs for class 06 vehicles during fiscal year 1980-81. Class 06 vehicles incurred fixed costs of \$233,324 and variable costs of \$246,235 in fiscal year 1980-81. With 113 vehicles being used on an average working day (260 working days), charging \$8 per day would have more than recovered the fixed expenses. (Adding in the replacement cost would increase this rate. The replacement cost was not charged in fiscal year 1980-81.) The approximate 160

class 06 vehicles each traveled about 24,000 miles per year; therefore, the variable costs could have been covered by charging \$.065 per mile.

Charging a split rate would also eliminate the need to monitor lease agreements. However, monitoring of vehicles usage would still be required. Some agencies may keep vehicles for extended periods of time and be willing to simply pay the daily charge for the convenience of having a vehicle available. A computerized review of trip tickets could "flag" those vehicles that are incurring low mileage use, but are checked out for long periods of time. The necessity of such an extended rental period could then be discussed with the user agency and the vehicle returned to the pool if the rental is not necessary.

RECOMMENDATION #12

WE RECOMMEND THE MOTOR POOL DEVELOP AND IMPLEMENT A SPLIT RATE SYSTEM TO BE USED FOR ALL MOTOR POOL VEHICLES.

CHAPTER VI

STAFFING

Proper staffing requires the placement of personnel in positions that can best benefit the organization. Staff effectiveness depends on management establishing job descriptions, communicating to personnel the duties they will be required to perform, and maintaining an organizational structure within which work may be most efficiently executed at all levels.

This chapter discusses the organization of the Motor Pool unit, the inconsistencies between job descriptions and actual duties, and the need for a review of staff working hours. A reevaluation of the Motor Pool's staffing patterns is recommended.

The following is a brief description of the general responsibilities of Motor Pool personnel. References made to staff work that should be performed by Motor Pool personnel are taken directly from position and job descriptions obtained from the Personnel Division of the Department of Highways. The department has formulated job descriptions for all Motor Pool personnel, detailing the duties and responsibilities assigned to employees.

- The division administrator creates and administers policy concerning the maintenance, repair, operation, replacement and disposal of vehicles and equipment within the division and the Department of Highways. He is responsible to the Director of Highways for the proper function of the division.
- The Chief of the Fiscal and Equipment Supply Bureau is responsible for supervising all fiscal functions of the division and acts as the division's purchasing agent. The fiscal bureau chief is required to report directly to the division administrator.

- The Motor Pool Unit manager is required to perform administrative and supervisory duties in managing the dispatch, repair, and maintenance of the motor vehicles.
- The Unit dispatcher is responsible for scheduling vehicles, checking vehicles in and out, and maintaining records related to the dispatching and usage of the Motor Pool fleet. The dispatcher reports directly to the Motor Pool manager.
- Servicemen perform work as general vehicle service attendants and are supervised by the Motor Pool Unit manager.

The following discussion describes the work Motor Pool personnel are actually performing in relation to their established duties. During our review, we noted that duties of the Motor Pool staff are not being effectively assigned or reviewed. Personnel are performing duties outside their position descriptions and are not performing other duties contained within job descriptions.

Actual Staff Duties

The division administrator is responsible for initiating the creation of records which reflect the fiscal operation of the division and for formulating meaningful inventory vehicle reports. We noted that the administrator had access to pertinent management information but has not developed procedures to make effective use of that information. For example, the monthly vehicle utilization printout (which contained errors) could have been reprogrammed to supply Motor Pool with needed vehicle utilization information. It could have been revised to provide information on the number of trips taken per vehicle and the number of days each vehicle is used per month. However, no procedures were initiated to produce meaningful information on vehicle use. In addition, the administrator's position description requires information to be directed to appropriate personnel. We noted that the utilization information

had not, until recently, been directed to the unit manager and dispatcher, the two personnel who need the information the most.

The division administrator is also responsible for reviewing and approving the work being performed by the division bureaus and the Motor Pool Unit. The division administrator should be periodically reviewing Motor Pool personnel's work to determine that staff are performing duties consistent with the responsibilities contained in their job descriptions.

As required by the position description, the Chief of the Fiscal and Equipment Supply Bureau is to supervise all fiscal functions of the division, to monitor financial matters and to establish standard procedures for the division to follow in making reports. In our review, we noted problems with regard to maintaining control over division fiscal operations. For example, the procedures used to calculate rental rates and lease rates are inadequately documented and have not been written in division manuals. Several mathematical errors in their calculation were found and documentation did not fully support additional charges added to the rental rates. Also, no monitoring of lease agreements, utilization of lease vehicles, or lease income was performed by the division. In order to maintain control over division fiscal operations, the Chief of the Fiscal and Equipment Supply Bureau should monitor all aspects of the division fiscal function.

The Motor Pool Unit manager is responsible for performing the following duties: reviewing and approving leases, inspecting all new units to determine acceptance or rejection, determining units

to be sold at auction, managing the maintenance of motor vehicle records, scheduling all maintenance and repairs to motor vehicles, and determining which units are to be utilized.

A review of the Motor Pool Unit manager job duties indicated that this individual is performing duties listed as responsibilities of the servicemen and the dispatcher. We noted that the manager picks up and delivers vehicle parts, pumps gasoline, and drives vehicles to the maintenance shop for repairs. These duties should be performed by the Motor Pool Unit servicemen. We also observed that the manager answers calls for vehicle requests, schedules vehicles, checks vehicles in and out, and moves vehicles to different Motor Pool locations; all duties specifically enumerated in the job description for the Motor Pool dispatcher.

The Motor Pool Unit dispatcher is to perform such duties as scheduling vehicles, answering calls for vehicle requests, checking vehicles in and out, compiling and preparing regular and special reports relating to the usage of Motor Pool vehicles, and maintaining all records and necessary documentation related to the dispatching of the Motor Pool fleet. We observed that the daily log used to keep a daily status record of all fleet vehicles had not been maintained regularly. The dispatcher position description specifically gives the dispatcher the authority to control these aspects of the Motor Pool operation. Our review indicated that the dispatcher did not complete all paperwork related to checking in Motor Pool vehicles and that the servicemen performed some of this work. The dispatcher is responsible for maintaining all records related to dispatching and should perform the appropriate tasks.

The serviceman is to service vehicles, pump gas, wash cars, clean engines, make small repairs, and keep records on fueling and lubrication during vehicle service. Our observations of Motor Pool Unit operations indicated that the servicemen perform these functions and also perform work outside their job description. During our review, we noted that the greatest number of vehicles are returned late in the week, making Thursday and Friday especially busy days for the servicemen. On these days both the manager and the dispatcher leave the unit at 3:00 p.m. and 4:00 p.m., respectively. Many vehicles are returned to the unit on Friday after the manager and dispatcher have left. The servicemen must complete the paperwork for the returned vehicles. This limits the time the servicemen can spend performing maintenance checks on the vehicles and may often not allow sufficient time to make a complete and proper check of fluid levels and other check-in items.

Staff Scheduling

The present scheduling of Motor Pool staff contributes to personnel performing duties other than those assigned and established. The Motor Pool should evaluate present staff scheduling. Hours for unit staff are structured in the following manner. The manager works from 7:00 a.m. to 3:00 p.m., Monday through Friday. The dispatcher works from 9:00 a.m. to 6:00 p.m., Monday and 7:00 a.m. to 4:00 p.m. the rest of the week. The servicemen work Tuesday through Saturday; one works 8:30 a.m. to 5:00 p.m., Tuesday - Thursday and 10:30 a.m. to 6:00 p.m. on Fridays. The other serviceman works 11:00 a.m. to 7:00 p.m. Tuesday - Friday. Both work 8:00 a.m. to 4:00 p.m. Saturday.

Motor Pool Unit employee work hours should coincide with the duties to be performed for each position. Consideration should be given to making the manager's hours 8:00 a.m. to 5:00 p.m. to provide better supervision of the maintenance and completion of motor vehicle records and dispatch and repair of the fleet. The dispatcher's work hours should be coordinated with the hours when vehicles are checked out and checked in. Many Motor Pool vehicles are checked out by 9:00 a.m. on Monday, yet the dispatcher starts work at that time. In addition, vehicles are returned after 4:00 p.m. with no dispatcher available four days out of the week. Changes in the dispatcher's hours would prevent the servicemen from having to complete vehicle paperwork and allow them to perform their required duties.

Motor Pool management should reevaluate its staffing patterns to determine what duties are currently being performed and the hours currently being scheduled for division personnel, and then determine what personnel structure is necessary. Staff performance could be enhanced through management's review of Motor Pool personnel position descriptions and through communicating to personnel what duties they are intended to perform. Employee work hours should be reviewed to ensure that work time is scheduled in an efficient manner.

RECOMMENDATION #13

WE RECOMMEND MOTOR POOL REEVALUATE PRESENT STAFFING PROCEDURES TO ENSURE PROPER PERSONNEL UTILIZATION.

CHAPTER VII

MOTOR POOL TRANSFER

The Department of Highways has been the only administrating agency of the state Motor Pool. The Motor Pool was placed under the authority of the Highway Department primarily because the department had the capabilities of providing maintenance for a motor vehicle fleet.

As illustrated in this report, administration of the Motor Pool requires expertise in all aspects of vehicle fleet management as well as vehicle maintenance. Our review found that present administration of Motor Pool operations is not always performed in an effective manner. Many of the problems encountered by the present administration in managing the fleet is, in part, attributable to the difference between the mission of the department and the mission of the Motor Pool. The department's mission is to construct and maintain Montana's roads and is directed toward serving the public. The Motor Pool's entire purpose is to provide vehicle service for state government agencies. It is for this reason that we believe consideration should be given to transferring the administration of the Motor Pool to an agency which better reflects the mission of a motor pool function.

Our review noted problems in all aspects of Motor Pool management. A brief summary of some of the major concerns we observed can best illustrate the problems that the Motor Pool needs to address before it can operate efficiently.

An important consideration in operating a fleet is to determine appropriate fleet size. We noted that the Motor Pool has not

conducted a study to determine the optimum number of vehicles to operate and, in fact, has too many vehicles in its current inventory.

The Motor Pool has also permanently assigned many of its vehicles. Many of the newest vehicles have been reserved for the Department of Highways. The majority of these vehicles received transferred radios, rendering them less available for interagency use and, therefore, promoting a poor image of the Motor Pool among personnel who must use other, older vehicles.

Management has also been leasing vehicles for use outside the Helena area. We found that no criteria was used in the assignment of leased vehicles and that lease agreements were not monitored adequately. These practices defeat the purpose of obtaining lower operating costs by pooling all vehicles in a central (Helena) location.

With regard to control of management information, the Motor Pool has not developed the proper information to assess fleet utilization and some of the information it has created contains errors. We noted that Motor Pool management was not aware of peak demand periods for vehicles and, therefore, cannot project vehicle needs. Also, no attempt has been made to expand these information sources and determine potentially valuable information such as average daily vehicle demand, even though this data is important and can be readily developed from present Motor Pool records.

Motor Pool management has also not established staffing procedures commensurate with the duties required of a service organization. The present Motor Pool administrative staff is directed

toward fulfilling the mission of the Highway Department, i.e., providing equipment for the maintenance and construction of roads, and is not fully committed to a service function.

A reorganization proposal recently released by the Department of Highways reviewed the position of the Motor Pool within the department. In defining the disadvantages of absorbing the Motor Pool and Equipment Division into the Maintenance division, the report states "the motor pool function will in some respects become an orphan or have to be assigned to the Maintenance Division. The Motor Pool and Maintenance Division have little in common in terms of mission but both share the need for vehicle maintenance facilities and staff."

The mission of the Department of Administration, providing service to state government agencies, is closely related to the mission of the Motor Pool. The department's statutory duty to provide services to state government agencies is a mission similar to the purpose of the Motor Pool which provides vehicle service to all Helena-based state agencies.

As a service organization, the Department of Administration performs the following types of functions: the Computer Services Division provides a central data processing facility for state agency use; General Services Division provides maintenance, building and grounds and security services, and the Purchasing Division administers central purchasing activities for all state agencies including the purchase of all state-owned vehicles.

We contacted other states with motor pools and the majority of the states have placed the operation within an agency similar to

the Department of Administration. Transferring the Motor Pool to the Department of Administration would place its function within an organization more closely related to Motor Pool's goal and mission.

Transfer of the Motor Pool to the Department of Administration would necessitate transfer of records, inventory, buildings, and the revolving account from the Department of Highways. A 1974 loan for \$227,000 from the Department of Highways Earmarked Revenue Fund for the construction of the Motor Pool facility would also need to be satisfied. Reimbursement for this loan to the Earmarked Fund is currently accomplished by including in the Motor Pool's charges to the individual state agencies using vehicles a sum of one half cent per mile. Therefore, repayment of the loan could be accomplished in the same manner if the Motor Pool were attached to the Department of Administration. The Department of Administration would also have to develop a system for accomplishing maintenance and repairs through a contract with the Department of Highways or the private sector. In addition, a system for processing accounting and management information will have to be established.

RECOMMENDATION #14

WE RECOMMEND ADMINISTRATION OF THE MOTOR POOL BE TRANSFERRED TO THE DEPARTMENT OF ADMINISTRATION.

AGENCY REPLIES



DEPARTMENT OF HIGHWAYS



TED SCHWINDEN GOVERNOR

2701 PROSPECT

STATE OF MONTANA

HELENA, MONTANA 59620

June 18, 1982

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Legislative Auditor
State Capitol
Helena, MT 59620

Dear Mr. Ringwood:

Attached are the Department's responses to recommendations listed in your audit of this agency.

If there are further questions to be answered, please advise.

Sincerely,

A handwritten signature in cursive script, reading "Gary J. Wicks".

Gary J. Wicks, Director
Department of Highways

GJW/JLP/pz/10J
Attachment

State of Montana
REPORT TO THE LEGISLATURE
STATE MOTOR POOL

RECOMMENDATION #1

WE RECOMMEND THE MOTOR POOL:

- A. ADOPT A FORMAL SYSTEM TO DETERMINE DEMAND FOR MOTOR POOL VEHICLES BASED UPON DAILY AND MONTHLY VEHICLE UTILIZATION.
- B. SET A POLICY OF MEETING LESS THAN 100 PERCENT OF USER VEHICLE REQUESTS, AND ESTABLISH FLEET SIZE BASED UPON THIS POLICY.

RESPONSE:

- A. We concur and will take action to develop and adopt such a system which will also include daily request data.
- B. We concur and will set such policy.

RECOMMENDATION #2

WE RECOMMEND MOTOR POOL:

- A. INCLUDE IN THE UTILIZATION PRINTOUT THE NUMBER OF VEHICLES USED PER DAY AND THE NUMBER OF TRIPS PER VEHICLE.
- B. SEND UTILIZATION INFORMATION IMMEDIATELY TO THE UNIT MANAGER.

RESPONSE:

- A. We concur and the information provided by the improved utilization printout will be used within the formal system to determine demand (recommendation no. 1).
- B. We have already implemented this recommendation.

RECOMMENDATION #3 WE RECOMMEND MOTOR POOL:

- A. ESTABLISH A POLICY TO PREVENT VEHICLES FROM BEING RESERVED OR PERMANENTLY ASSIGNED.
- B. DISCONTINUE PLACING SPECIAL EQUIPMENT IN MOTOR POOL VEHICLES.

RESPONSE:

- A. The Department is presently taking steps to place all necessary permanently assigned Motor Pool vehicles under lease to the budget area that requires the vehicle. We presently have 23 units in the Motor Pool with radios and 6 are on lease to the Department. After some reassignments and adjustments we will have 11± radio units on lease to the Department. We will leave another 5 radio units in the pool for all agency use to be assigned by reservation only.
- B. Because two-way radios are a necessary tool in the operation of the Highway Department and state government, we feel it is necessary to provide a certain amount for Helena based agencies.

RECOMMENDATION #4

WE RECOMMEND MOTOR POOL DISCONTINUE THE PILOT CAR PROGRAM.

RESPONSE:

The pilot program was instituted because of continuing requests from agencies, including the Auditor's Office, for units in major cities after either using a van or commercial transportation from Helena. The intent of this program is to provide transportation for Helena based employees after they have arrived in these areas either by pooled means or commercial transportation. The units in Bozeman and Missoula have been utilized very little and they are being discontinued. The three units in Billings are presently being utilized at the rate of 1500± miles a month each. We plan to continue the Billings service until utilization drops.

RECOMMENDATION #5

WE RECOMMEND MOTOR POOL:

- A. CHANGE SERVICING INTERVALS FOR OIL CHANGES TO MANUFACTURER'S RECOMMENDATIONS OF 7,500 MILES FOR ALL VEHICLE CLASSES.
- B. CHANGE THEIR LUBRICATION INTERVALS FOR ALL VEHICLE CLASSES TO BETTER REFLECT MANUFACTURER'S RECOMMENDATIONS.

RESPONSE:

- A. Because the manufacturer's recommendations include both ideal and severe operating condition suggestions (7500 ideal - 3000 severe), we feel our present service interval of 5000 miles in classes 01, 04, 05, 06 & 07 best fits or fleet situation. Our oil change interval in classes 02, 03 & 12 of 3000 miles is established within the manufacturer's severe conditions recommendation and we feel our use of these vehicles within our fleet fit these conditions. We do have nationally published data on file to substantiate our position.
- B. Our lubrication intervals in classes 01, 04, 05, 06 & 07 will be adjusted to better reflect the manufacturer's recommendations. The 3000 mile interval in classes 02, 03 & 12 fits the manufacturer's recommendation for severe conditions and we feel it fits our use of these vehicles.

RECOMMENDATION #6

WE RECOMMEND MOTOR POOL:

- A. DEVELOP A SYSTEM TO RECORD AND MONITOR ALL USERS' COMMENTS.
- B. USE THIS SYSTEM TO ASSURE PROPER REPAIRS ARE MADE.

RESPONSE:

We concur and a policy will be written and a system developed which will include a follow-up procedure.

RECOMMENDATION #7

WE RECOMMEND MOTOR POOL IMPLEMENT PROCEDURES TO ENSURE VEHICLE FLUID LEVELS ARE MAINTAINED PROPERLY.

RESPONSE:

Our observation of the audit personnel's procedures during their random sampling was that they were not checking fluid levels while units were warm. They also make no reference to what level the fluids were at.

We presently have in effect procedures that call for our serviceman to check all fluid levels during the check-in process when each unit has been returned after use and we feel the procedures are working efficiently and we do not agree that we are improperly maintaining fluid levels.

RECOMMENDATION #8

WE RECOMMEND MOTOR POOL DOCUMENT PROCEDURES FOR RATE CALCULATION.

RESPONSE:

We are presently in the process of documenting both the daily rental rate and lease rate calculation procedures.

RECOMMENDATION #9

WE RECOMMEND MOTOR POOL REVISE ITS METHOD OF DEPRECIATING VEHICLES BY ADJUSTING RESIDUAL VALUES TO MORE CLOSELY APPROXIMATE VALUE UPON DISPOSAL.

RESPONSE:

We recognize the fact that our resale value has been closer to 25-30% of the vehicle acquisition cost instead of the 10% that we have set our residual value at. We will investigate the possibility of setting a residual value based on our best estimate of resale value at the time of acquisition.

RECOMMENDATION #10

WE RECOMMEND THE MOTOR POOL CALCULATE REPLACEMENT RATES USING ONLY THOSE CHARGES DIRECTLY RELATED TO THE COSTS OF VEHICLE REPLACEMENT.

RESPONSE:

We concur and will adjust our replacement rates accordingly.

RECOMMENDATION #11

WE RECOMMEND MOTOR POOL SET RATES USING CRITERIA BASED ON RECOVERING ACTUAL COSTS FOR EACH CLASS OF LEASE VEHICLE.

RESPONSE:

We concur and our lease rental rate calculation procedure will reflect the suggested criteria.

RECOMMENDATION #12

WE RECOMMEND THE MOTOR POOL DEVELOP AND IMPLEMENT A SPLIT RATE SYSTEM TO BE USED FOR ALL MOTOR POOL VEHICLES.

RESPONSE:

We do not entirely agree with the split-rate concept mainly because of the simplicity of our present straight mileage and minimum rate system. We will agree to give this system some consideration and possibly even implement it, especially on leased vehicles.

RECOMMENDATION #13

WE RECOMMEND MOTOR POOL REEVALUATE PRESENT STAFFING PROCEDURES TO ENSURE PROPER PERSONNEL UTILIZATION.

RESPONSE:

We will reevaluate the staffing and make the changes that are possible within the present authorized FTE limits. Any drastic improvements would mean both an increase in FTEs and possibly an upgrade for the Manager. Either would result in higher rental rates.

RECOMMENDATION #14

WE RECOMMEND ADMINISTRATION OF THE MOTOR POOL BE TRANSFERRED TO THE DEPARTMENT OF ADMINISTRATION.

RESPONSE:

The Department of Highways has no self interest in continuing to manage the Motor Pool and we concur in the recommendation, but we do feel that the legislature should look at the whole Motor Pool situation. Problems currently facing the Motor Pool are: declining vehicle use because of increased personal vehicle use and ownership of vehicles by individual Helena based agencies. Presently the high rate on personal vehicle use is 1.5¢ less than the per mile rate on Motor Pool sedans and currently some agencies are encouraging their employees to use their personal vehicles. This coupled with increased Helena based agency vehicle ownership has driven utilization down thus causing operating costs to rise. A legislative review and revision of the statutes effecting the Motor Pool should be made, and possibly the issue of whether or not a Helena based Motor Pool is necessary should be addressed.

Whatever agency is in control of the Motor Pool, there are the above and other specific problems that need to be addressed.

RESPONSE Continued
(Recommendation #14)

Other improvements that could help to improve the operation of the Motor Pool are; better office facilities and an on-site wash/service bay; possibly one additional FTE (clerk/back-up dispatcher) for improved staffing, and a Motor Pool Manager with an increased amount of duties and responsibilities. This would mean a higher grade level but by making the Manager more responsible for the total management of the Motor Pool it would become more autonomous from the Department of Highways or any other controlling agency.

All of these suggested improvements could possibly lead to higher operating costs but overall we believe they would also lead to greater efficiency for operation of the Motor Pool and state government.

JLP/pz/337L

DEPARTMENT OF ADMINISTRATION
DIRECTOR'S OFFICE



TED SCHWINDEN, GOVERNOR

MITCHELL BUILDING

STATE OF MONTANA

(406) 449-2032

HELENA, MONTANA 59620

RECEIVED

JUN 16 1982

MONTANA LEGISLATIVE AUDITOR

June 15, 1982

Scott Seacat
Principal Audit Manager
Performance and Sunset Audits
Office of the Legislative
Auditor
State Capitol
Helena, MT 59620

Dear Scott:

We have reviewed the performance report of the state Motor Pool. Specifically, we would like to respond to recommendation #14. That recommendation is to transfer the administration of the Motor Pool to the Department of Administration.

We do not take a position on the recommendation. However, if the Legislature decides to transfer the Motor Pool to this department, we will take steps to insure a smooth transition. Our plans are to create a task force to identify problems and solutions posed by the transfer. In addition to help from the Department of Highways, we would appreciate input from the Legislative Auditor's Office because of the detailed analytical work recently completed on the Motor Pool.

Sincerely,

A handwritten signature in cursive script, appearing to read "Morris".

MORRIS L. BRUSETT
Director

